

No 14

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109 Spruce St. Ducong  
exchanged with Mr Fox No 66  
Papet M. 10<sup>th</sup> 1828

Thesis.

on

The Primary seat of  
Fever.

by

Charles Welling

of

Pennsylvania

Jan 11<sup>th</sup> 1828

24

Apr 11 1878

Dear

Mr

The Secretary

of the

Board of Trustees

of the University

## On the Primary seat of Froth

The morbid affection of the body is of more frequent occurrence, more extensively fatal, more about the nature of which more has been written, and yet (strange to say) even now, more more visited in obscurity than Fever. The nature of this disorder judging from the number and eagerness of the inquiries into it; would appear to have been considered the magnum opus, the Philosophiæ stone in medicine; but though the researches in pursuit of it, have been unintermitting they have established nothing decisively, so far at least as the prox-



imate cause and primary seat of Fever are concerned. Indeed many eminent men appear to have given up all expectation of such a discovery ever taking place; Jackson the author of the work on the Fever of Jamaica observes "The proximate cause of Fever is a subject of a dark nature, it is such, perhaps as our limited capacities will never develop."

The numerous theories of Fever, that have at different periods, ~~made~~ been promulgated and have held their sway, it will be unnecessary to recapitulate, it is sufficiently encouraging to know, that each succeeding one being based on an increased accumulation of facts and development of principles has been rather more



optimal than its predecessor, thus in-  
spiring hopes that we are gradually  
approaching the time, when this, this  
difficult problem shall be solved to  
the satisfaction of all. One great ad-  
vance has been made by the adoption  
of inflammation as the proximate  
cause of Puer, this point is at-  
present conceded, and the contest is  
when we shall locate our inflam-  
mation in order to produce the fever,  
the parties are divided into two.  
Those who consider the brain as  
the inflamed organ and those who  
point to the stomach for its origin.

Let us compare the symptoms of  
inflammation of the brain ~~with~~ with  
those of fever; the first is evidenced  
by "acute pain in the head, intolerance



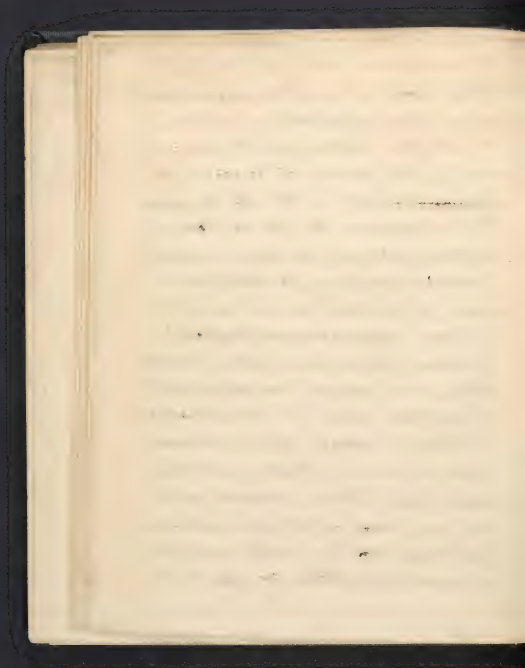


of light and sound, cheeks permanently  
 flushed, eyes red, watchfulness, delirium  
 rapid pulse; "such are the symptoms of  
 inflammation of the meninges of the brain  
 when seated in the gland itself, it is  
 marked by "obscure pain in the head  
 cheeks irregularly flushed, pulse irreg-  
 ular, frequent, eyes oblique, stupor  
 heavy but unquiet, and occasionally  
 interrupted by screams." Fever is mani-  
 fested according to one of the advocates  
 of the identity of the cause of both  
 affections by "languor insensibility of the  
 extremities, blindness and insensibility,  
 pain in the back. horripilation, pain  
 in the fore head, delirium, anxiety-  
 nausea and vomiting." when the fever  
 is ~~high~~ typhoid the stupor is greater  
 and it resembles more the paralytic

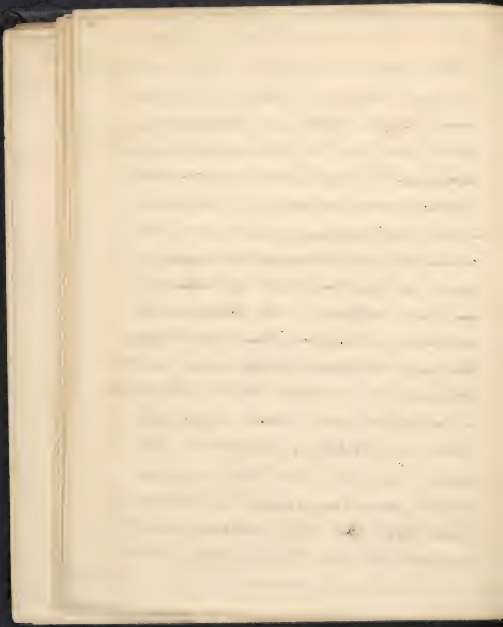


inflammation; it must be confessed that  
there are many symptoms in common,  
but with this difference, in the one case  
caused by the presence of disease in the  
~~sympathetic~~ part, in the other by sympa-  
thy; to confirm this let us adduce a  
disease producing all these symptoms  
of disorder present in the head, but in  
which it is allowed on all sides that  
it is only sympathetically affected;

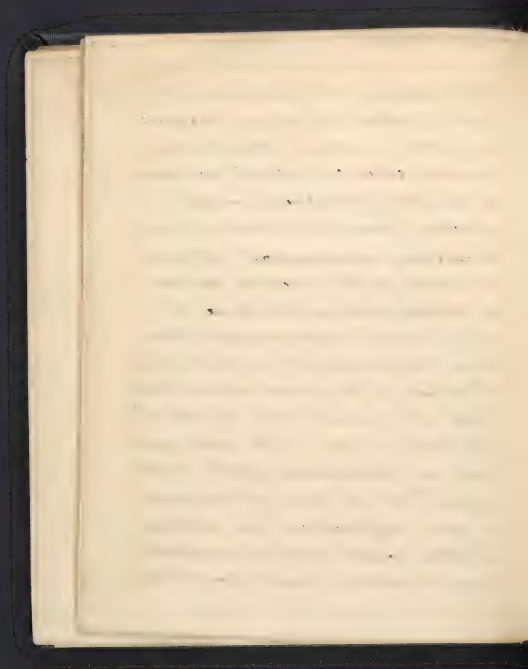
In worms for instance, when situated  
either in the stomach or upper part  
of the alimentary canal the symptoms are  
headache, vertigo, disturbed dreams,  
stomach broken out by fright, screaming,  
feverishness, ~~loss~~ of appetite, nausea, and the  
other symptoms a hot skin with alter-  
nate rigors, ~~and~~ hard corded pulse, and  
as far as symptoms go you have



a fever, but it so happens, that these symptoms that are wanting to enable worms <sup>to</sup> pass muscles for idiopathic fever, are by Dr Clark established the great champion of brain fever not considered pathognomonic signs; by him pain in the head, languor, weakness in the extremities, are thought the marks of fever, in fact as head and stomach are both affected, he takes all the evidence of disordered brain and saying there are the true pathognomonic symptoms deduces very naturally to the satisfaction of all who with great the premises that the disease is located in the brain, his words are "the characters which serve especially to distinguish fever from the other diseases are to be sought for in the functions of the

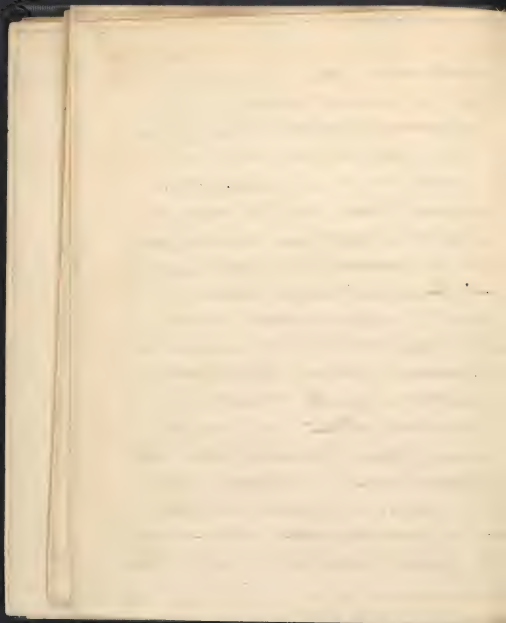


of the sensorium, the disturbed state of which furnishes the only true diagnostic symptoms," he observes "that disorder vascular action and increased heat cannot be considered pathognomonic marks" I ask why "because it is secondary, common to ordinary inflammation" but is not disturbance in the sensorium common to disorder of the prima via and a constant accompaniment of some when they prevail with a certain degree of intensity: In worms referred to before the symptomatic affection of the head is one of the most painful and troublesome affections: I would appear <sup>must</sup> that this reason of commonness is not a sufficient one for excluding all other except sensorial symptoms since it might be urged against them

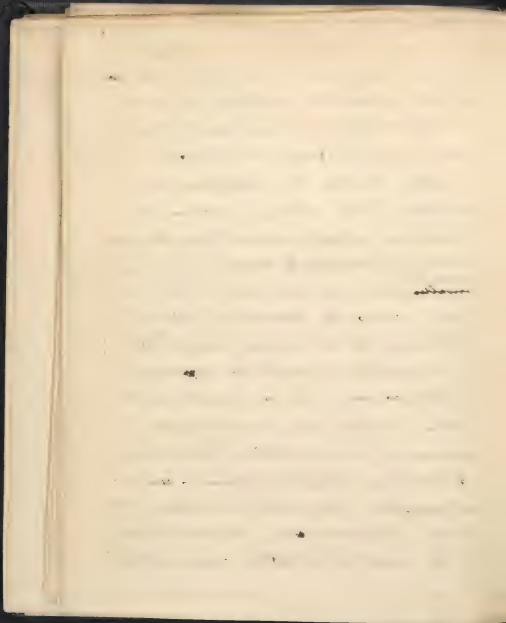




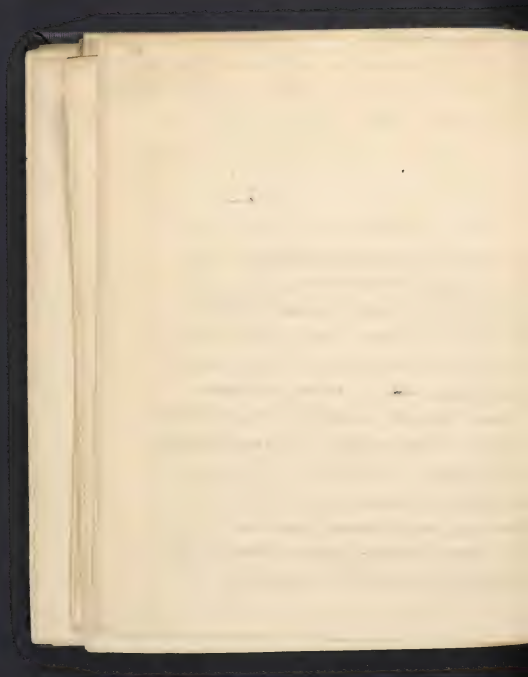
equally with the other. The claim of  
 rigor and increased pulse to be considered  
 pathognomonic symptoms being vindicated  
 let us examine how this can be  
 explained on the supposition of an  
 inflamed brain being the cause of  
 fever, it would seem that this can-  
 not be accounted for on this supposition  
 and for a good reason rigor is not  
 caused by inflamed brain according  
 to the symptoms before enumerated  
 the increased pulse is, but the order of  
 symptoms is equally diagnostic with  
 the existence of them, and preceding  
 rigor followed by increased pulse is the  
 established order of symptoms in fever  
 it is not so in inflamed brain. There  
 is no preceding rigor. let us now apply  
 the opposite supposition of gastric irritation



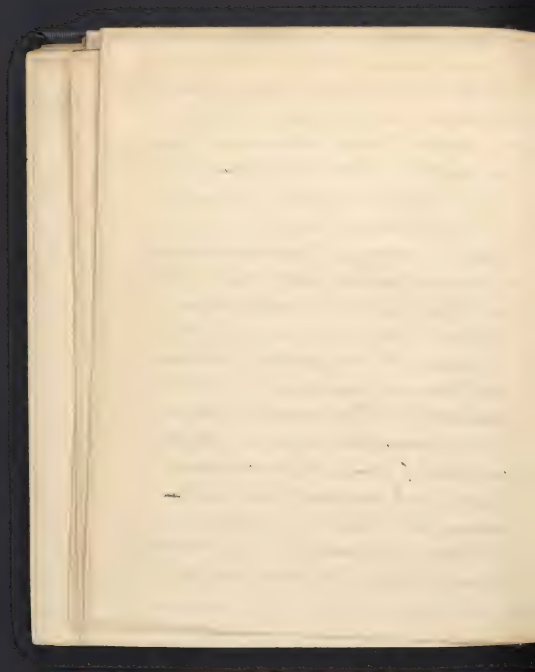
in the first place, and the brain sympathetically  
affected after that irritation has reached  
a certain degree of excitement; this will  
account for the gaze; the internal ir-  
ritation withdraws the blood from the  
surface to the internal viscera, the  
blood thus suddenly abstracted from the surface  
dies, and renders its demand on the brain  
<sup>for nervous fluid</sup> ~~insupportable~~ less, and this state of life under  
gross causes the sensation of rigors and  
chilliness; but the increased flow of blood  
to the centre augments the unpleasantness  
of the viscera, this is reported to the  
brain, which communicates an  
increase of innervation (which always  
is the case when the brain is excited  
not congested) this excites the action of the  
heart, the pulse rises, the blood is drawn  
by the heart to the surface causing a flush



of heat, a depression takes place & the  
 skin and health is often restored, and  
 I suppose to be the course in the slight-  
 est attack of that disorder we call  
 fever, such is intermittent, why  
 in this it continues to be reached with  
 intervals of apparent health is still  
 a mystery, But as the supporters of the  
 Brain Fever adduce most of their  
 argument from fact which occur-  
 ret in intermittents but in magis-  
 tant fevers etc we shall now examine  
 them. All the authorities brought forward  
 testify to the existence of great cerebral  
 disturbance, and that of by no means  
 a mere sympathetic kind, on the  
 contrary great lesion has been proved  
 in post mortem examinations, but they  
 likewise speak of the stomach as being



disorder in the highest degree; of whom  
this testimony only proves that in highly  
malignant fever both brain and stomach  
are affected; what is the primary  
seat of disease remains to be ascertained,  
and I think may be best ascer-  
tained by observing what means nature  
employs, when she works her own cure  
and what organs the curative means  
employed run more peculiarly adapted  
to relieve. Dr. Ross speaking of the malign-  
ant fever of Jamaica says amongst other  
symptoms the <sup>head</sup> was extremely affected  
but he observes that the disease was often  
cut short by copious bilious evacuation  
upward and downward, this directly in-  
dicates the stomach and leading us  
naturally to suppose that this accumu-  
lation of acid bile caused all the





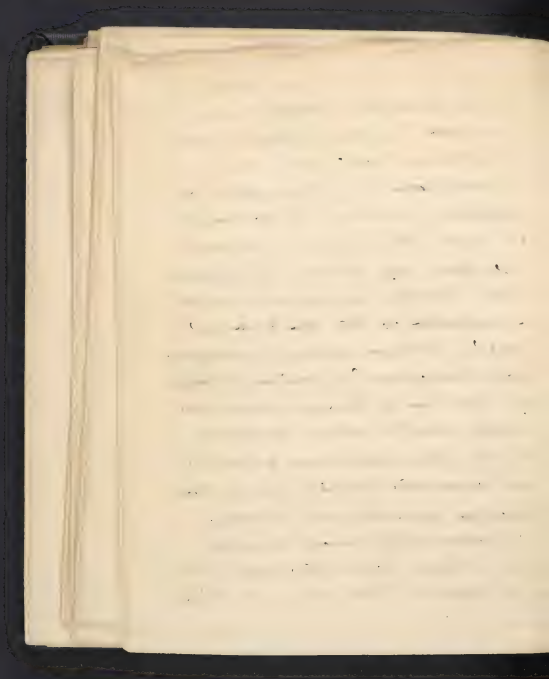
disturbance in the head: In the Plague that  
raged at Cracow in Poland there was  
indefatigable headache and delirium in  
fact all Dr. Cullen's essential symp-  
toms, but when copious sweats broke  
out spontaneously, a defecation directly  
relieving the abdominal viscera, the  
rue was relaxed; Dr. Sims speaking  
of a low fever that occurred in Poland  
says that it was often carried off by  
a diarrhoea, in this kind that all  
the means exerted by nature in Jews  
are those which directly unload the  
stomach and bowels; we are therefore  
knowing the simplicity and directness  
with which nature always act. In the  
attainment of her purposes & presume  
that the organ upon which she act direct  
is the one in need of aid, and not



that she has after a round one for  
the purpose of indirectly affording reason  
to the demand part; and runs  
the conclusion to be drawn from the  
operation of nature, let us see if  
the means adopted & not confining it-

Dr Monro says speaking of the Jamaica  
Jew "That the men aged, brought  
in proportion as they were debilitated and  
runged." Mr Bayne speaking of a malignant  
Jew which appeared on board an East-Indiaman  
says "That when low delirium, nervous tremors  
fainting seemed to indicate the greatest  
debility; after several copious and extensive  
repeated evacuations ground & purging the  
threatening symptoms went off curing.

Dr Jackson in his remarks on yellow  
Jew observes "Persons who enter into the  
apartments of those who are ill of the



Never surely fail to experience unpleasant  
 sensations at stomach in distention,  
 not unfrequently uneasiness in the bowels  
 head ache, heat, pain in the eyes; then  
 beginning of the morbid action local  
 may be the most part removable  
 by the application of remedies that  
 act locally, that is emetics, purga-  
 tives or others which produce decided  
 changes in the secreting surfaces  
 of the alimentary canal. Dr Cullenbach  
 would say I also think purgative amongst  
 the most valuable remedial means; on  
 what principle do they relieve an inflamed  
 brain? he would say on that of secretion  
 Granting this to be correct it follows, that  
 the more powerful the secretion the  
 more beneficial the effects; consequently  
 on this theory the most harsh and <sup>rough</sup> ~~strong~~



operating purgatives ought to be given  
but they are not. Why? because experience  
teaches that harsh, strong purgatives  
are injurious. Bright observes that  
when given too early they induce delirium  
the very symptom they ought to relieve  
according to the revulsive theory. so must  
for purgatives, emetics peculiarly con-  
sist in the view of unloading the  
stomach & vomiting and producing  
relaxation of the skin are highly useful,  
such is the view of experience but  
they ought to be directly trustful on  
the brain theory and Dr Cadmus, it-  
tminally "In say, from theory the use  
of emetics in fever might be deemed  
improper and even dangerous." ~~The~~  
Thus find the artificial means of cure  
lead us to form the same conclusion





That the natural effect depends on the  
 form, since we find more <sup>as</sup> uniform  
~~in the former~~ unloading the stomach, <sup>directly</sup> with the exception  
 of general bleeding, which may be  
 considered as equal unloading than  
 viscus ~~the~~ <sup>with</sup> the brain.

Such are some of the objections that  
 may be urged in opposition to the  
 Brain Theory of Fever, objections  
 which were not only to invalidate  
 that supposition, but tend strongly to  
 support the opposite idea of the  
 Stomach being the primary seat of  
 disease —

